

Amendments to the Claims:

1) (previously provided): A method of filtering data prior to reading a digital watermark that was inserted using a scale to black technique, said method comprising: projecting color values of each pixel onto a preferred projection axis that is adaptively determined by examining color of at least some of the pixels surrounding each pixel, wherein the preferred projection is adaptively determined from said examining and not through selection of a predetermined projection axis without such an examination, whereby watermark reading is aligned to watermark insertion, and reading the watermark from resulting data.

2) (canceled).

3) (previously presented): A method of calculating values that will be used to read a watermark from a digital image, wherein the digital image comprises a plurality of pixels, said method comprising: projecting color values of each particular pixel to a preferred projection axis, said preferred projection axis being determined by averaging at least some color values of pixels in an area adjacent to a particular pixel; and providing results of said projecting.

- 4) (previously presented): The method recited in claim 1 wherein pixels in an area of three by three pixels are examined to determine the preferred projection axis.
- 5) (previously presented): The method recited in claim 1 wherein said watermark has a particular tile size and wherein pixels in an area of said tile size are examined to determine the preferred projection axis.
- 6) (canceled).
- 7) (canceled).
- 8) (previously presented): The method recited in claim 3 wherein pixels in an area of three by three pixels are averaged to determine the preferred projection axis.
- 9) (previously presented): The method recited in claim 3 wherein said watermark has a particular tile size and wherein pixels in an area of said tile size are averaged to determine the preferred projection axis.
- 10) (canceled).

11) (previously presented): A system for reading a digital watermark in an image that comprises a number of pixels each represented by a set of numbers representing different colors, said system comprising:

a filter which projects the set of numbers representing color of each pixel onto a preferred projection axis by averaging color values of pixels of a particular area, and  
a watermark reading program for reading said watermark from said preferred projection axis.

12) (previously presented): A system for reading a digital watermark from a color image that comprises a number of pixels each having multiple color components, said system comprising:

means for adaptively filtering the color image to project color components of each pixel to a preferred projection axis, wherein projecting color components is based at least in part on local color content of the color image for an image area that is associated with each pixel; and  
means for reading the watermark from the filtered image.

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Patent

13) (canceled).

14) (canceled).

15) (canceled).

16) (canceled).

17) (canceled).

18) (previously presented): A method of reading two orthogonally inserted watermarks from an image, wherein the image comprises a plurality of pixels, said method comprising:

filtering the image to project each pixel of the plurality of pixels onto a preferred projection axis, wherein the preferred projection axis is determined at least in part by an average color of associated pixels;

reading the first watermark from data resulting from said filtering;

projecting each pixel onto an axis that is orthogonal to the preferred projection axis; and

reading the second watermark from resulting data.

19) (canceled).

20) (previously presented): A method of filtering an image containing a digital watermark to generate a set of values from which the digital watermark can be read, wherein the digital watermark is inserted along a particular color direction, said method comprising:  
approximating a plurality of color directions that the digital watermark is likely embedded along through analysis of a plurality of local color characteristics of the image;  
and  
searching for the digital watermark in the approximated color directions.

21) (canceled).

22) (currently amended): A system for reading a digital watermark from a digital image which includes a number of pixels, each pixel being defined by a set of numbers representing color components of the particular pixel, said system comprising:  
a filter for calculating a value of each pixel along a preferred projection axis, the preferred projection axis corresponding to a direction of embedding determined based on color characteristics of at least some pixels associated with each pixel; and  
a watermark reader which operates on the values calculated by the filter, [[The method of claim 2]] wherein the preferred projection axis is determined based on color characteristics of at least some pixels associated with each pixel and not through a predetermined projection axis without such a determination of color characteristics.

23) (previously presented): The method of claim 22 wherein the predetermined projection axis comprises a luminance axis.